DOCUMENT RESUME

ED 085 842 88 EA 005 723

TITLE Facilitation of the Development of a Systems Approach to the Management of Educational Resources. An End of Project Report.

INSTITUTION Racine Unified School District 1, Wis.
SPONS AGENCY Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C.
PUB DATE 15 Mar 73
NOTE 58p.

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DESCRIPTORS *Academic Achievement; *Curriculum Planning; Educational Objectives; *Educational Resources; Elementary Schools; *Management; Measurement Techniques; Program Planning; Secondary Schools; Summative Evaluation; Systems Analysis; *Systems Approach; Tables (Data); Test Results
IDENTIFIERS Elementary and Secondary Education Act Title III; ESEA Title III

ABSTRACT

To clearly delineate the objectives of this ESEA Title III project, the objectives for the total systems analysis development project being undertaken by the Racine School District are described briefly. Specifically, this report concerns itself with two of the nine objectives of the project. The first is the development of learning outcomes specifications and concomitant measurement criteria for the elementary school curriculum in mathematics, social studies, and art. The second is the training or retraining of selected staff in those knowledges and skills necessary for the optimal development of the component parts of the total systems analysis procedures. According to the report, the outcomes of the project far exceeded expectations. An appendix of statistical data demonstrates that the systems approach described here can result in increased student achievement. (Author/WM)

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Has Appendix

ED 085842

END OF PROJECT REPORT FOR E S E A - TITLE III PROJECT "FACILITATION OF THE DEVELOPMENT OF A SYSTEMS APPROACH TO THE MANAGEMENT OF EDUCATIONAL RESOURCES"

EA

Unified School District #1
County of Racine
2230 Northwestern Avenue
Racine, Wisconsin

C. Richard Nelson
Superintendent of Schools

414-637-9511

Edwin W. Benter
Project Director

414-637-7928

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EA 005 723

PI-AD-39
(8-68)

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
CENTER FOR RESEARCH AND PROGRAM DEVELOPMENT
126 Langdon Street
Madison, Wisconsin 53702

PROJECT DATA FORM
TITLE III, E.S.E.A.

FOR STATE DEPARTMENT USE ONLY	CO.	DIST.	SCH.	PROJ. NO.	EXP. CODE	AMOUNT APPROVED

SECTION A -- GENERAL INFORMATION

1. Project Title

Facilitation of the Development of A Systems Approach to the Management of Educational Resources

2. Brief Summary of Purpose of Project

To provide resources to combine with local resources to develop components of an input/output analysis system to educational processes

3. Type of Submission (check one)

- ☐ Initial Application - Planning
- ☐ Initial Application - Operational
- ☐ Continuation Grant
- ☐ End of Budget Period Report
- ☒ End of Project Period Report

4. Type of Project (Initial application or resubmission only)

- ☐ Planning
- OR
- ☐ Operational (check one below)
  - ☐ Innovative
  - ☐ Exemplary
  - ☐ Adaptive

5. Applicant Agency Unified School District #1 County of Racine Racine, Wisconsin	Address 2230 Northwestern Avenue Racine, Wisconsin 53404	
6. Name of Project Director Edwin Benter	Address 1341 Park Avenue Racine, Wisconsin 53403	Telephone No. 637-7928 Area Code 414
7. Superintendent or CESA Coordinator (Please type) C. Richard Nelson	Address 2230 Northwestern Avenue Racine, Wisconsin 53403	Telephone No. 637-9511 Area Code 414

8. I hereby certify that the information contained in this application is, to the best of my knowledge, correct and the local education agency named above has authorized me, as its representative, to file this application.

C. Richard Nelson
Signature of Person Authorized to Receive Grant

March 15, 1973
Date Submitted

SECTION A -- Continued

9. List the Number of Each Congressional District Served.	10a. Total Number of LEA's Served	1	Average Per Pupil Expenditure of Local Education Agencies Served
1st	10b. Total Estimated Population in Geographic Area Served	127,000	11a. Preceding Year June 30, 19 72 $
			11b. Second Preceding Year June 30, 19 71 $

SECTION B -- TITLE III BUDGET SUMMARY FOR PROJECT

		PREVIOUS OE GRANT NUMBER	BEGINNING DATE (Month, Year)	ENDING DATE (Month, Year)	FUNDS REQUESTED
A.	Initial Application or Resubmission		Dec. 1, 1969	Aug. 31, 1970	$ 27,644.00*
B.	Application for First Continuation Grant	59-70-0149	Sept.1, 1970	Aug. 31, 1971	$ 38,342.00
C.	Application for Second Continuation Grant		Sept.1, 1971	Nov. 30, 1972	$ 37,074.00
D.	Total Title III Funds				$ 103,060.00*
E.	End of Budget Period Report			March 15, 1973	

SECTION C -- SCHOOL ENROLLMENT, PROJECT PARTICIPATION DATA AND STAFF MEMBERS ENGAGED

1.

			PRE-KDG.	KDG.	GRADES 1-3	GRADES 4-6	GRADES 7-12	TEACHERS Elem.	TEACHERS Sec.	SPECIAL ED ADULTS	TOTALS	STAFF MEMBERS IN-SERVICE TRN
A.	School Enrollment in Area Served	(1) Public	540	2420	6660	7067	14,714			692	32,093	
		(2) Non-Public	0	155	1710	1859	2,054			0	5,184	
B.	Persons Served by Project Direct Participation	(1) Public	0	2420	6660	7067	0			0	16,147	522
		(2) Non-Public	0	0	0	0	0			0	0	0
C.	Persons Served by Project Indirect Participation	(1) Public										
		(2) Non-Public										

2. TOTAL NUMBER OF PARTICIPANTS BY RACE (Applicable to figures given in item 1B above)

WHITE	NEGRO	AMERICAN INDIAN	OTHER NON-WHITE	TOTAL
12,918	2,260	5	964	16,147

3. RURAL/URBAN DISTRIBUTION OF PARTICIPANTS SERVED OR TO BE SERVED BY PROJECT

PARTICIPANTS	RURAL		METROPOLITAN AREA		
	FARM	NON-FARM	CENTRAL-CITY	NON-CENTRAL CITY	OTHER URBAN
PERCENT OF TOTAL NUMBER SERVED	5	10	20	55	10

*Actually expended first year $16,871.00 Thru year adjusted total = $92,287.00
*Actually expended 2nd year $27,579.00 Thru year adjusted total = $81,524.00

SECTION C -- Continued

4. Estimate the percent of children served from families whose income is

A. $2,000.00 or less 14 % B. Over $2,000.00 86 %

SECTION D -- PERSONNEL FOR ADMINISTRATION AND IMPLEMENTATION OF PROJECT

PERSONNEL PAID BY TITLE III FUNDS

	TYPE OF PAID PERSONNEL	REGULAR STAFF ASSIGNED TO PROJECT			NEW STAFF HIRED FOR PROJECT		
		Full-Time	Part-Time	Full-Time Equivalent	Full-Time	Part-Time	Full-Time Equivalent
		1	2	3	4	5	6
A.	Administration/ Supervision		1	1/2			
B.	Teacher:						
	(1) Pre-Kindergarten						
	(2) Kindergarten						
	(3) Grades 1-6		1	1/4			
	(4) Grades 7-12						
	(5) Other						
C.	Subject Matter Specialists (artist, scientist, musician, etc.)						
D.	Technicians (audio-visual computer specialists)						
E.	Pupil Personnel Workers (counselors, social workers, psychologists)						
F.	Medical and Psychiatric Personnel						
G.	Researchers and Evaluators		1	1/4			
H.	Planners and Developers						
I.	Disseminators (writers, public relations personnel, editors)						

SECTION E -- PERSONS SERVED BY APPROVED INITIAL OR CONTINUATION PROPOSALS, ESTIMATED COST, AND TOTAL NUMBER OF PERSONS SERVED (PUPILS MAY BE COUNTED MORE THAN ONCE)

MAJOR PROGRAM OR SERVICES	Grades							Adult	Other	Number of Non-Public Pupils	Estimated Cost (Amount may overlap)
	Pre-K	K	1	2	3	4-6	7-12				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A. School Administration, Development, Evaluation, and Research Survey	0	2727	(7,380)			(7,396)					$37,074
B. Teacher In-service Training											
C. Major Subject Emphasis											
Arts (music, theater, etc)	"	"	"	"	"	"	"				12,919
Foreign Language											
Mathematics	"	"	"	"	"	"	"				12,919
Science											
Social Stds/Humanities	"	"	"	"	"	"	"				12,919
Vocational/Inds Arts											
Other (specify)_____											
D. Instructional Media/Tech Library Fac/Media Cen											
Computers	"	"	"	"	"	"	"				6,500
Education TV/Radio											
Other (specify) Systems Anal	"	"	"	"	"	"	"				37,074
E. Instructional Methodology Specify_____											
F. Special Education, Remediation, and Pupil Personnel Programs											
Handicapped											
Remedial Reading											
Medical/Dental/Health											
Social/Psychological											
Educational Guidance											
G. Programs											
Follow through of Pre-K Program											
Dropout											
Equal Educ Opportunity											
Pre-Kindergarten											

NARRATIVE SECTION

I. OBJECTIVES FOR ESEA - TITLE III PROJECT - FACILITATION OF THE DEVELOPMENT OF A SYSTEMS APPROACH TO THE MANAGEMENT OF EDUCATIONAL RESOURCES

In order to clearly delineate the objectives of the project for which Title III funds were expended, it is necessary to describe in brief the objectives for the total systems analysis development project being undertaken by the Unified School District of Racine. This is done by a description of the nine goals or objectives of the total project.

OBJECTIVE A

The development of learning outcomes specifications and concomitant measurement criterion for the elementary school curriculum in three content areas: (a) mathematics, (b) social studies and (c) art.

1. The instructional staff of the Unified School District of Racine will develop a list of curriculum objectives, or more specifically, a continuum of learning outcome specifications for art, mathematics and social studies for grades kindergarten through sixth.
2. The instructional staff will develop an appropriate measurement criteria for assessing the level of attainment of outcome specifications.

OBJECTIVE B

The training or retraining of selected staff in those knowledges, skills, etc. necessary for the optimal development of the component parts of the total systems analysis procedures.

1. To attend those short-term workshops or training sessions or conferences which purport to provide needed information skills and technological procedures.

2. To visit those institutions, educational and otherwise, which have highly developed and relevant systems analysis procedures or components thereof and which by such visitation can provide needed input into the local development project.

3. To obtain the necessary consultation input relevant to the need for the development of any of the component parts, including resources for the instructional staff in the three project content areas for aid in the establishment of learning outcome specifications and related measurement procedures.

4. To obtain all the literature relevant to the total project task and compile an annotated bibliography of these materials.

5. To document the input derived from those activities described in 1-3 and an evaluation of the activities' effectiveness.

(The two objectives above and their several sub-objectives are those for which Title III funds are being expended. The remaining objectives listed below represent activities to be carried out by the Unified School District and serve to place in perspective the total developmental project being undertaken.)

OBJECTIVE C

The development of a program based budgeting accounting system that is adopted to the existing computer storage and retrieval system.

OBJECTIVE D

Development of a computerized student data bank.

OBJECTIVE E

Development of analysis procedures for relating input factors to output measures.

OBJECTIVE F

The development of a district-wide in-service training program for all instructional staff in order to upgrade classroom evaluation and strategies.

OBJECTIVE G

The development of outcome specifications and related measurement criteria for all curriculum content areas, grades K-12.

OBJECTIVE H

The implementation of the system-wide procedure for a cost effectiveness analysis and the establishment of productivity indices for evaluation of instructional staff, individually or collectively.

Since Title III funds were expended only for Objectives A and B, this report will deal only with the evaluation of those objectives.

OBJECTIVE A - SUB-OBJECTIVE 1

The evaluation of this sub-objective is based upon the reports submitted in the three subject areas- art, mathematics and social studies. In art, two reports are included. One entitled "Art for Elementary Schools" breaks out the tasks for art. This is accompanied by a second report which deals with the specific learning outcome specifications related to various tasks and the measurement criteria used in assessing these specifications. The learning outcome specifications have not been completely defined for art, K-6; however, much work has been done which is evidenced in the second report.

In mathematics, a report has been submitted which includes a description of the mathematics program. Within this report learning outcome specifications are listed for all grades, K-6.

In social studies, three reports have been or will be submitted. The report entitled "Social Studies Skills" contains all of the learning outcome specifications, K-6, in the area of skill development. Two other reports dealing with social studies have also been submitted. One is an overview of the present state of the art in teaching social studies concepts. The other is a matrix for grades 4-6 which describes the major social studies concepts to be acquired at these grade levels in the areas of history, anthropology, sociology, political science, economics and geography.

Has the objective been accomplished? That is, has a continuum of learning outcome specifications been developed for art, mathematics and social studies for grades kindergarten through sixth.

In all three areas a continuum of learning outcome specifications has been developed as evidenced by the various reports referred to previously. In some areas the specifications are more specific than in others. Work is continuing in all three areas to make these specifications as useable as possible.

OBJECTIVE A - SUB-OBJECTIVE 2

Again, the reader is referred to the reports discussed under sub-objective 1. Within each of these reports are included examples of the measurement criteria developed in each area. Measurement criteria has been developed for all learning outcomes specified. As to the appropriateness, consensus has been arrived at through use and reuse that the instruments are appropriate. Consultants and teachers in the three subject areas have all agreed that the instruments do measure the learning outcomes. However, as in all instances of measurement development, the instruments are being continually revised. No instrument used in the first year of project is still being used in its entirety at the present time.

OBJECTIVE B - SUB-OBJECTIVES 1 & 2

Short-term workshops, training sessions and conferences which were attended and sites which were visited are listed below.

1. Association of School Business Officials (including workshops sponsored by the Educational Resources Management Project)
2. American Educational Research Association Annual Meeting, Minneapolis, 1970
3. Educational Technology Conference, New York, 1970
4. Midwestern States Educational Information Project, Pierre, South Dakota, 1970
5. Wisconsin Educational Research Association, Oshkosh, Wisconsin, 1970
6. American Educational Research Association-Pre-Session (Multivariate Analysis Techniques), Princeton, 1971
7. American Educational Research Association-Pre-Session (Non-parametric Techniques), New York, 1971
8. American Educational Research Association Annual Meeting, New York, 1971
9. Institute for Educational Research, Downers Grove, Illinois, 1971
10. Wisconsin Association for Educational Data Systems, Milwaukee, Wisconsin, 1971
11. National Association for Educational Data Systems, Toronto, 1971
12. ETS Conference on Accountability, Chicago, 1971
13. Educational Technology Conference, New York, 1971
14. CTB-McGraw-Hill Evaluation Workshop, Milwaukee, 1971
15. Title III Evaluation Seminar, Stevens Point, 1971
16. ETS, 1971, Invitational Conference on Testing Problems, New York
17. National Records Bureau Annual Meeting, New York, 1971
18. Wisconsin Educational Research Association Annual Meeting, Milwaukee, 1971
19. Educational Technology Conference, New York, 1972
20. American Educational Research Association Annual Meeting, Chicago, 1972

21. National Association for Educational Data Systems, Minneapolis, 1972

22. TIES Project, Minneapolis, 1972

23. Milwaukee Public Schools, Milwaukee, Wisconsin, 1972

24. National Center for Higher Education Management Systems, Denver,1972

A number of the various workshops and sessions attended are discussed and critiqued in the annotated bibliography which has been produced. Many of the ideas and practical applications used in this Title III project are a direct result of attendance at some of the meetings listed above.

OBJECTIVE B - SUB-OBJECTIVE 3

In the strictest sense of the interpretation of consultation input, the three persons named below would not be considered as consultants. However, Dr. Helen Patton, John Aceto and Jon Hancock were probably the hardest working group of people involved in this Title III project.

Dr. Helen Patton, the Unified School District's art consultant, was the leader in the development of learning outcome specifications in the field of art. The amount of quality work completed under her direction is observable in the report submitted for the area of art.

John Aceto, the District math consultant, not only developed a most complete list of specifications in the field of mathematics, but also provided input into the development of a revolutionary test-scoring and feedback system which will be discussed later in this narrative. Mr. Aceto's leadership in the field of mathematics can be best observed by noticing the increased achievement of students on nationally standardized tests. (A copy of the Unified School District's performance on nationally standardized achievement tests from 1965 through 1972 is appended to this report.)

Jon Hancock did most of the work in the area of social studies during the 1970-1971 school year. His position during this school year was assistant to the District social studies consultant. Almost completely on his own, he developed the "Social Studies Skills Guide", "A Conceptual Framework for the Social Studies", and reviewed the state-of-the-art in social studies by contacting more than twenty state departments of education and various national social studies projects.

Other consultants utilized were Dr. Brent Wilson from the University of Iowa, Dr. Robert Remstad from the University of Wisconsin-Milwaukee, Dr. M. C. Hillery, former project director, now with Gateway Technical Institute, Racine and Mr. Richard Johnson from the Western Inter-State Commission for Higher Education.

Dr. Brent Wilson aided Dr. Patton in the area of art specifications and measurement. Dr. Robert Remstad was of much assistance in determining methods of data analysis in regard to "The Assessment Inventory". Dr. M. C. Hillery, the director of this Title III project for the first two years, was used as a consultant during the third year and wrote the series of position papers entitled "Systems Analysis: Its Application to Education". Richard Johnson should probably be listed along with the three District consultants as one of the hardest workers in this project. Mr. Johnson wrote and tested the approximately thirty-three (33) different computer programs utilized in the "Racine Diagnostic Feedback System". This system is discussed in the "Overview", "User's Guide" and "Systems Documentation".

OBJECTIVE B - SUB-OBJECTIVE 4

An annotated bibliography of the materials read and reviewed has been compiled.

OBJECTIVE C - SUB-OBJECTIVE 5

The input derived from those activities described in 1-3 and their evaluation is included in the reports mentioned under sub-objectives 1-4.

II. UNPREDICTED OUTCOMES

The specification of learning outcomes and the development of measurement criteria in the field of art can be considered as exceeding anticipated outcomes. The fact that documented evidence of student achievement in art has been produced and that this evidence has been produced through the use of fairly simple and straight-forward techniques, is of itself an outcome far exceeding anticipation.

The use of diagnostic feedback, related to previously specified learning outcomes, in a practical manner is an outcome exceeding anticipation in the field of mathematics. The use of this feedback resulted in marked increases in student mathematics achievement.

Probably the most significant unanticipated outcome was the development of a test scoring and analysis system not found to have an equal in any of the literature reviewed or other projects observed. This system is completely documented in the "User's Guide" and the "Systems Documentation".

Other unpredicted outcomes were the emergence of a periodic diagnostic testing program in the areas of mathematics, reading, social studies and language arts and the use of learning outcome specifications in the revision of the District reading and language arts curricula.

An anticipated outcome not achieved was the development of consistent learning outcome specifications, K-6, in the area of social concepts. Some movement was made in this area, however, the wide range of topics covered in social studies from grade to grade and within grade levels stymied the

project staff in its attempt to develop a continuum of learning outcome specifications for social studies concepts. The anticipated outcome of retraining teachers to use system analysis techniques has not been met completely, however, work is continuing in this area.

III. IMPACT OF TITLE III

The most important changes resulting from this project are:

1. The use of the strategy developed for specifying learning outcomes in other areas of curriculum besides those of emphasis.
2. The use of criterion-referenced tests and diagnostic feedback to aid teachers in the instruction of students.
3. The use of data in the decision-making process.
4. The improvement of student achievement in various curricular areas (see Appendix).
5. The continuation of methods developed during the life of the Title III project.

IV. COOPERATIVE EFFORT

No cooperative effort took place. The project served only the local education agency.

V. DISSEMINATION

Project information during the life of the project was disseminated mainly through State Title III Dissemination Conferences. One national dissemination effort took place when the project was presented at the Annual Meeting of the Association for Educational Data Systems at Toronto in 1971. One state-wide dissemination effort took place when an article describing this project was submitted to the State Title III office for publication in the "Wisconsin Journal of Instruction". Much more dissemination has occurred during the last few months of the project and is expected to continue after the completion of the project. These efforts are

mainly a result of personal contacts made at the Title III Dissemination Conference at Wausau and Madison and other meetings attended by project staff. This procedure is consistent with previously planned procedures. It is expected that once the various products produced by this project are reviewed by members of the education community, many more opportunities for dissemination will occur.

VI. PHASING OUT OF FEDERAL FUNDING

The fact that the project's purpose was to facilitate the local District's efforts to develop a "systems" procedure and that this project was directed by the director of the Unified School District's Research Department on a half-time basis resulted in an integration of the project goals and objectives into the normal day-to-day operation of the school district. Therefore, this project seems to have never been viewed as being a federal project separate from normal local efforts. This has resulted in the continuation of project efforts with virtually no change immediately upon discontinuation of Title III funds. One example of this continuation and acceptance of funding can be demonstrated by the fact that the District has already spent approximately $2500 to allow for completion of the documentation of the Racine Diagnostic Feedback System. Another example is the fact that the only staff position for which funding was not assumed by the District was the half-time secretary. It is this writer's opinion that if a project can be so interwoven into a school district's day-to-day operation so as to almost lose its identity, no methods and procedures need to be developed to carry the project forward without federal support.

EXPENDITURE REPORT
Title III, E.S.E.A.
☐ Estimated Expenditure Report
☐ Final Expenditure Report

WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION
CENTER FOR RESEARCH AND PROGRAM DEVELOPMENT
126 Langdon Street
Madison, Wisconsin 53702

PI-43 (Rev 4-69)

NAME AND ADDRESS OF AGENCY	PROJECT NUMBER	BUDGET PERIOD (Month, day, year)
Unified School District #1 of Racine County 2230 Northwestern Avenue, Racine, Wis. 53404	59-70-0149	Beginning: 9-1-71 Ending: 11-30-72

PART I - EXPENDITURES

	Functional Classification	Acct. No.	Salaries		Contracted Services	Materials & Supplies	Travel	Equipment	Other Expenses	Total Expenditures
			Professional	Non-Professional						
	1	2	3	4	5	6	7	8	9	10
1	Administration	100	$ 11,265.84	$ 2,251.32	$9,396.92	$ 558.59	$ 892.43	$	$	$ 24,365.10
2	Instruction	200	5,675.31	1,850.10	2,635.74	182.37	502.66			10,846.18
3	Attendance Services	300								
4	Health Services	400								
5	Pupil Transportation Services	500								
6	Operation of Plant	600								
7	Maintenance of Plant	700								
8	Fixed Charges	800	1,168.08	593.60						1,761.68
9	Food Services	900								
10	Student-body Activities	1000								
11	Community Services	1100								
12	Remodeling (if less than $2000)	1220c								
13	Capital Outlay (equipment only)	1230								
14	TOTAL		18,109.23	4,695.02	12,032.66	740.96	1,395.09			36,972.96

PART II - FISCAL SUMMARY

1. Amount Authorized	$ 37,074.00
2. Amount Expended	$ 36,972.96
3. Unexpended Balance	$ 101.04
4. Cumulative Total	$ 37,074.00
5. Cash Received	$ 31,234.62

Signature of Superintendent _____

Date _____

APPENDIX

This appendix has been included in this report as evidence that a systematic approach to education through the specification of learning outcomes and their measurement can result in increased student achievement.

Department of Research and Development
Unified School District No. 1 of Racine County
Racine, Wisconsin

1965-66 - 1971-72 STANFORD ACHIEVEMENT TEST RESULTS - Grades 1, 2, 3, 5 and 6
1965-66 - 1969-70 KUHLMANN-ANDERSON TEST RESULTS - Grades 2 and 5
1970-71 - 1971-72 OTIS-LENNON TEST RESULTS - Grades 2 and 5

	Page
District Distribution - Grade Equivalents	1
Inner-City Distribution - Grade Equivalents	5
Outer-City Distribution - Grade Equivalents	9
District Distribution - Raw Score	13
Inner-City Distribution - Raw Score	17
Outer-City Distribution - Raw Score	21

1/72

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

District Distribution

Subtest	Yr.	1st Grade *			2nd Grade **			3rd Grade			5th Grade **			6th Grade		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Word Meaning	65				1.6	2.2	2.6	2.9	3.6	4.2	4.0	5.1	5.9	5.1	6.5	7.7
Gr. 3, 5, 6	66				1.6	2.2	2.7	2.8	3.5	4.0	4.0	5.1	6.1	5.2	6.5	7.7
	67				1.6	2.2	2.7	2.8	3.5	4.0	3.8	4.9	5.8	5.1	6.5	7.6
Vocabulary	68				1.7	2.2	2.7	2.7	3.4	4.0	3.8	4.9	5.9	5.0	6.3	7.5
Gr. 2	69				1.8	2.4	2.9	2.8	3.4	4.0	4.1	5.2	6.4	4.9	6.2	7.5
	70	29%	55%	76%	1.9	2.4	2.9	2.8	3.5	4.0	3.9	5.1	6.1	5.1	6.3	7.6
Letters & Sounds	71	37%	62%	79%	2.0	2.4	2.9				4.0	5.2	6.3	5.0	6.1	7.5
Gr. 1	72															
	73															
	74															
	75															
Paragraph Meaning	65				1.6	1.8	2.4	2.8	3.3	4.1	3.7	4.7	5.8	4.7	5.8	7.2
Gr. 2, 3, 5, 6	66				1.5	1.7	2.3	2.7	3.4	4.1	3.7	4.7	5.8	4.7	5.9	7.2
	67				1.5	1.7	2.3	2.7	3.4	4.3	3.6	4.6	5.7	4.7	6.0	7.3
Aural	68				1.5	1.7	2.3	2.7	3.3	4.1	3.7	4.7	5.9	4.6	5.8	7.1
Comprehension	69				1.6	1.9	2.6	2.7	3.3	4.1	3.7	4.8	6.0	4.7	5.9	7.2
Gr. 1	70	24%	49%	75%	1.7	2.0	2.7	2.8	3.4	4.2	3.8	4.9	6.1	4.7	5.9	7.2
	71	28%	53%	77%	1.7	2.1	2.7				3.9	4.9	6.1	4.6	5.7	7.2
	72															
	73															
	74															
	75															
Spelling	65				1.4	1.7	2.3	2.9	3.6	4.2	4.0	4.9	5.9	5.1	6.2	7.4
Gr. 2, 3, 5, 6	66				1.3	1.7	2.2	2.6	3.4	4.2	4.0	4.9	6.0	5.0	6.2	7.4
	67				1.3	1.7	2.2	2.6	3.5	4.2	3.9	4.7	5.6	4.8	5.9	7.1
	68				1.3	1.7	2.2	2.7	3.4	4.1	3.9	4.7	5.7	4.7	5.8	7.0
	69				1.6	2.1	2.5	2.6	3.4	4.0	4.0	4.8	5:8	4.8	6.0	7.1
	70				1.7	2.2	2.6	2.7	3.5	4.1	4.0	4.8	5.8	4.8	6.0	7.1
	71				1.7	2.2	2.6				3.9	4.7	5.9	4.7	5.8	7.0
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

District Distribution

Subtest	Yr.	1st Grade *			2nd Grade **			3rd Grade			5th Grade **			6th Grade		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Word Study Skills	65				1.5	2.0	2.6	2.7	4.0	5.8	3.7	5.4	6.7			
Gr. 2, 3, 5	66				1.5	1.9	2.6	2.5	3.7	5.6	3.4	5.3	6.7			
	67				1.6	1.9	2.6	2.6	3.7	5.8	3.3	5.1	6.5			
	68				1.5	1.9	2.6	2.5	3.7	5.7	3.4	5.2	6.6			
	69				1.7	2.2	2.8	2.4	3.8	5.6	3.6	5.7	6.8			
	70				1.8	2.3	3.0	2.6	3.9	5.7	3.6	5.5	6.8			
	71				1.8	2.4	3.1				3.6	5.5	6.8			
	72															
	73															
	74															
	75															
Language	65				1.5	1.7	2.2	2.8	3.4	4.4	3.4	4.5	5.8	4.5	5.8	7.3
Gr. 3, 5, 6	66				1.5	1.7	2.2	2.7	3.2	4.1	3.3	4.5	5.7	4.5	5.8	7.2
	67				1.5	1.7	2.3	2.6	3.2	4.1	3.3	4.3	5.6	4.3	5.7	7.3
Word Meaning	68				1.5	1.7	2.2	2.6	3.2	4.1	3.3	4.3	5.6	4.1	5.5	7.0
Gr. 1, 2	69				1.6	1.9	2.5	2.6	3.2	4.1	3.1	4.0	5.3	4.1	5.4	6.8
	70	23%	56%	77%	1.7	2.0	2.6	2.8	3.7	4.8	3.3	4.4	5.7	4.1	5.5	6.9
	71	36%	63%	84%	1.7	2.1	2.7				3.6	4.8	6.1	4.2	5.6	7.2
	72															
	73															
	74															
	75															
Arithmetic	65				1.7	2.1	2.5	2.7	3.1	3.6	3.9	4.4	5.1	5.1	5.9	6.5
Computation	66				1.7	2.0	2.4	2.8	3.3	3.7	3.9	4.5	5.1	5.0	5.8	6.5
Gr. 3, 5, 6	67				1.7	2.0	2.4	3.0	3.5	3.7	3.7	4.3	4.8	4.8	5.6	6.3
	68				1.7	2.0	2.5	3.0	3.5	3.7	3.9	4.5	5.1	4.8	5.7	6.6
Arithmetic	69				1.8	2.2	2.6	3.2	3.6	3.9	4.3	5.0	5.8	5.2	6.0	7.1
Gr. 2	70	25%	52%	80%	1.9	2.3	2.6	3.3	3.7	4.0	4.3	5.0	5.8	5.2	6.2	7.3
	71	33%	60%	85%	1.9	2.3	2.7				4.4	5.2	5.9	5.2	6.2	7.3
Mathematics	72															
Gr. 1	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents

District Distribution

Subtest	Yr.	1st Grade * Q_1	1st Grade * Q_2	1st Grade * Q_3	2nd Grade ** Q_1	2nd Grade ** Q_2	2nd Grade ** Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade ** Q_1	5th Grade ** Q_2	5th Grade ** Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Arithmetic Concepts Gr. 3, 5, 6	65							2.7	3.3	4.3	4.2	5.2	5.9	5.4	6.2	7.2
	66							2.6	3.2	4.3	4.1	5.1	5.9	5.2	6.1	7.0
	67							2.7	3.4	4.4	3.9	5.1	5.8	5.0	6.0	6.8
	68							2.7	3.4	4.4	4.1	5.1	6.1	5.0	6.0	6.9
	69							2.7	3.4	4.5	4.3	5.4	6.3	5.2	6.3	7.3
	70							2.7	3.7	4.6	4.4	5.4	6.3	5.2	6.3	7.3
	71										4.5	5.5	6.4	5.2	6.3	7.2
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65										4.0	4.8	5.8	4.8	5.9	7.5
	66										4.0	4.7	5.8	4.8	5.8	7.3
	67										3.9	4.7	5.6	4.5	5.7	7.0
	68										3.9	4.7	5.8	4.4	5.6	6.7
	69										4.0	4.9	6.1	4.6	5.8	7.1
	70										4.0	4.9	6.3	4.6	5.9	7.3
	71										4.0	4.9	6.2	4.6	5.9	7.2
	72															
	73															
	74															
	75															
Social Studies Gr. 5, 6	65							2.7	3.6	4.8	4.1	5.1	6.3	5.0	6.1	7.5
	66							2.7	3.8	4.6	4.1	5.1	6.3	4.9	6.0	7.3
	67							2.7	3.8	4.8	4.0	4.9	6.1	4.9	5.8	7.2
Social Studies & Science Gr. 3	68							2.7	3.5	4.5	4.0	4.9	6.0	4.6	5.6	6.8
	69							2.7	3.6	4.6	4.1	5.1	6.2	4.7	5.7	6.8
	70	23%	48%	76%				2.7	3.6	4.6	4.2	5.2	6.3	4.8	5.8	7.0
	71	28%	53%	79%							4.2	5.2	6.2	4.5	5.5	6.7
Environment Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

District Distribution

Subtest	Yr.	1st Grade * Q_1	1st Grade * Q_2	1st Grade * Q_3	2nd Grade ** Q_1	2nd Grade ** Q_2	2nd Grade ** Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade ** Q_1	5th Grade ** Q_2	5th Grade ** Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Science Gr. 5, 6	65										4.0	5.1	6.4	4.8	6.1	7.8
	66										4.0	5.0	6.4	4.7	6.0	7.8
	67										3.8	4.8	6.2	4.6	5.9	7.6
	68										3.8	4.9	6.1	4.4	5.7	7.4
	69										4.0	5.0	6.2	4.6	6.0	7.6
	70										3.9	4.9	6.2	4.6	5.8	7.5
	71										4.0	5.0	6.2	4.4	5.7	7.2
	72															
	73															
	74															
	75															
I.Q. *** Gr. 2, 5	65				102.0	112.0	122.0				97.1	107.6	118.6			
	66				100.9	110.7	119.7				95.2	106.2	117.6			
	67				101.5	111.0	120.0				95.5	106.0	117.5			
	68				101.5	111.0	120.3				96.5	107.8	119.0			
	69				100.0	108.5	118.0				96.5	107.0	119.0			
	70				93.0	102.8	113.0				93.0	103.0	113.0			
	71				94.0	103.0	113.0				92.7	103.7	113.5			
	72															
	73															
	74															
	75															

* No grade equivalents presently available - Expressed as equivalent national percentiles - Adopted in 1970.

** 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since then testing has been done at the 13th and 14th weeks.

*** Kuhlmann-Anderson I.Q. test was given from 1965-69. Otis-Lennon Mental Ability Test was adopted in 1970.

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Inner-City Distribution

Subtest	Yr.	1st Grade *			2nd Grade **			3rd Grade			5th Grade **			6th Grade ****		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Word Meaning	65															
Gr. 3, 5, 6	66															
	67				1.4	1.6	2.1	2.3	2.8	3.5	3.2	3.8	4.8	4.2	5.1	6.2
Vocabulary	68				1.4	1.6	2.1	2.3	2.8	3.3	3.3	3.9	5.1	4.1	4.7	5.7
Gr. 2	69				1.4	1.7	2.2	2.0	2.7	3.1	3.3	3.9	5.1	3.9	4.9	6.0
	70	15%	33%	57%	1.5	1.8	2.3	2.2	2.7	3.4	3.2	3.7	4.9	3.9	4.9	6.2
Letters & Sounds	71	23%	45%	71%	1.5	1.9	2.4				3.2	3.8	4.8	4.1	4.8	5.6
Gr. 1	72															
	73															
	74															
	75															
Paragraph Meaning	65															
Gr. 2, 3, 5, 6	66															
	67				1.5	1.6	1.7	2.2	2.8	3.5	2.9	3.6	4.4	3.9	4.8	6.1
Aural	68				1.4	1.5	1.7	2.0	2.7	3.2	3.1	3.8	4.9	3.8	4.4	5.4
Comprehension	69				1.4	1.6	1.8	1.9	2.5	3.0	3.0	3.7	4.7	3.8	4.6	5.9
Gr. 1	70	11%	28%	54%	1.5	1.6	1.9	2.0	2.7	3.2	3.0	3.8	4.7	3.8	4.6	5.8
	71	13%	30%	57%	1.5	1.7	2.2				2.9	3.7	4.6	3.6	4.4	5.3
	72															
	73															
	74															
	75															
Spelling	65															
Gr. 2, 3, 5, 6	66															
	67				1.1	1.5	1.8	2.0	2.9	3.7	3.3	4.0	4.8	4.3	5.1	6.0
	68				1.0	1.3	1.6	2.0	2.8	3.5	3.4	4.1	5.1	4.0	4.8	5.8
	69				1.2	1.6	2.0	1.9	2.5	3.2	3.4	4.1	5.1	4.1	5.0	6.2
	70				1.5	1.8	2.3	2.0	2.7	3.4	3.4	4.0	4.9	4.3	5.1	6.2
	71				1.5	1.8	2.4				3.3	3.9	4.6	4.1	4.9	6.0
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Inner-City Distribution

Subtest	Yr.	1st Grade * Q1	Q2	Q3	2nd Grade ** Q1	Q2	Q3	3rd Grade Q1	Q2	Q3	5th Grade ** Q1	Q2	Q3	6th Grade **** Q1	Q2	Q3
Word Study Skills	65															
Gr. 2, 3, 5	66															
	67				1.4	1.6	1.9	2.0	2.8	4.8	2.5	3.3	4.9			
	68				1.3	1.5	1.9	2.0	2.5	3.6	2.6	3.6	5.5			
	69				1.4	1.7	2.0	1.8	2.2	3.2	2.5	3.4	5.3			
	70				1.4	1.8	2.1	2.0	2.5	3.6	2.6	3.4	5.3			
	71				1.5	1.8	2.3				2.5	3.3	5.2			
	72															
	73															
	74															
	75															
Language	65															
Gr. 3, 5, 6	66															
	67				1.4	1.6	1.8	2.4	2.8	3.4	2.7	3.2	4.0	3.4	4.5	5.5
Word Meaning	68				1.4	1.5	1.7	2.2	2.6	3.1	2.8	3.4	4.3	3.3	4.0	5.2
Gr. 1, 2	69				1.4	1.6	1.8	2.2	2.5	2.9	2.5	2.9	3.7	3.2	3.9	5.3
	70	12%	41%	68%	1.5	1.7	2.0	2.4	2.8	3.5	2.7	3.2	4.2	3.2	3.9	5.3
	71	19%	50%	87%	1.5	1.8	2.2				2.9	3.4	4.5	3.3	4.0	5.3
	72															
	73															
	74															
	75															
Arithmetic	65															
Computation	66															
Gr. 3, 5, 6	67				1.5	1.7	2.1	2.8	3.3	3.6	3.4	3.9	4.3	4.1	5.0	5.6
	68				1.5	1.7	2.0	2.8	3.3	3.6	3.6	4.3	4.8	4.1	4.8	5.6
Arithmetic	69				1.6	1.9	2.1	2.8	3.2	3.6	3.7	4.4	5.0	4.6	5.4	6.3
Gr. 2	70	13%	33%	62%	1.6	1.8	2.2	2.8	3.3	3.7	3.7	4.4	5.2	4.7	5.4	6.2
	71	19%	42%	74%	1.7	2.0	2.4				3.7	4.4	5.2	4.6	5.3	6.1
Mathematics	72															
Gr. 1	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Inner-City Distribution

Subtest	Yr.	1st Grade *			2nd Grade **			3rd Grade			5th Grade **			6th Grade ****		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Arithmetic Concepts Gr. 3, 5, 6	65															
	66															
	67							2.3	2.7	3.8	2.8	3.8	4.8	4.3	5.2	6.1
	68							2.3	2.7	3.3	3.3	4.3	5.2	4.0	4.9	5.8
	69							2.2	2.6	3.3	3.3	4.3	5.4	4.6	5.2	6.3
	70							2.3	2.8	3.7	3.3	4.4	5.2	4.3	5.2	6.1
	71										3.3	4.3	5.3	4.2	5.1	5.9
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65															
	66															
	67										3.3	3.9	4.6	4.0	4.6	5.7
	68										3.4	4.0	4.9	3.8	4.4	5.4
	69										3.4	4.0	4.9	4.0	4.6	5.7
	70										3.4	4.0	4.9	4.0	4.5	5.6
	71										3.4	4.0	4.8	3.8	4.4	5.5
	72															
	73															
	74															
	75															
Social Studies Gr. 5, 6	65															
	66															
	67							2.2	2.7	3.6	3.5	3.9	4.6	4.1	4.8	5.8
Social Studies & Science Gr. 3	68							2.0	2.6	3.3	3.5	4.1	5.0	4.1	4.6	5.3
	69							2.0	2.6	3.3	3.5	4.0	4.6	4.1	4.6	5.5
	70	10%	25%	46%				2.1	2.7	3.5	3.6	4.0	5.0	4.0	4.5	5.3
Environment Gr. 1	71	13%	30%	54%							3.5	4.0	4.8	3.9	4.3	5.1
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Inner-City Distribution

Subtest	Yr.	1st Grade * Q_1	Q_2	Q_3	2nd Grade ** Q_1	Q_2	Q_3	3rd Grade Q_1	Q_2	Q_3	5th Grade ** Q_1	Q_2	Q_3	6th Grade **** Q_1	Q_2	Q_3
Science Gr. 5, 6	65															
	66															
	67										3.4	3.8	4.5	3.8	4.6	5.8
	68										3.5	3.9	4.9	3.7	4.3	5.2
	69										3.4	3.8	4.7	3.8	4.6	5.8
	70										3.4	3.8	4.6	3.7	4.2	5.6
	71										3.4	3.8	4.6	3.6	4.2	5.2
	72															
	73															
	74															
	75															
I.Q. *** Gr. 2, 5	65															
	66															
	67				93	101	110				86	95	105			
	68				93	101	110				88	97	108			
	69				93	102	111				86	96	107			
	70				84	93	100				83	92	101			
	71				83	93	102				83	90	99			
	72															
	73															
	74															
	75															

* No grade equivalents presently available - Expressed as equivalent national percentiles - Adopted in 1970.

** 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since the testing has been done at the 13th and 14th weeks.

*** Kuhlmann-Anderson I.Q. test was given from 1965-69. Otis-Lennon Mental Ability Test was adopted in 1970.

**** Includes no 6th grade condensed scores.

Prior to 1967-68, Inner-City Distributions were not calculated.

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Outer-City Distribution

Subtest	Yr.	1st Grade *			2nd Grade **			3rd Grade			5th Grade **			6th Grade ****		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Word Meaning	65															
Gr. 3, 5, 6	66															
	67				1.9	2.4	2.9	3.0	3.6	4.2	4.0	5.2	6.3	5.6	6.7	7.6
Vocabulary	68				1.9	2.4	2.9	3.0	3.6	4.2	4.1	5.2	6.1	5.3	6.5	7.5
Gr. 2	69				2.1	2.5	3.1	3.0	3.6	4.2	4.4	5.6	6.7	5.2	6.2	7.5
	70	35%	62%	79%	2.2	2.6	3.1	3.0	3.6	4.1	4.2	5.4	6.4	5.4	6.4	7.5
Letters & Sounds	71	43%	66%	81%	2.2	2.6	3.1				4.4	5.4	6.4	5.2	6.3	7.5
Gr. 1	72															
	73															
	74															
	75															
Paragraph Meaning	65															
Gr. 2, 3, 5, 6	66															
	67				1.6	1.8	2.5	3.0	3.7	4.4	3.8	4.9	6.1	5.0	6.1	7.3
Aural	68				1.6	1.8	2.5	2.9	3.6	4.3	3.9	4.9	6.0	4.8	6.0	6.9
Comprehension	69				1.7	2.2	2.7	2.9	3.6	4.3	4.1	5.2	6.3	4.8	6.0	7.0
Gr. 1	70	33%	56%	77%	1.7	2.3	2.8	3.0	3.6	4.4	4.1	5.3	6.5	4.8	6.0	7.2
	71	34%	59%	82%	1.8	2.3	2.8				4.1	5.3	6.4	4.8	5.9	7.1
	72															
	73															
	74															
	75															
Spelling	65															
Gr. 2, 3, 5, 6	66															
	67				1.5	1.8	2.3	3.0	3.6	4.4	4.0	5.0	5.9	5.0	6.2	7.1
	68				1.5	1.8	2.5	2.9	3.6	4.2	4.0	4.8	5.8	4.8	5.9	7.0
	69				1.8	2.2	2.6	2.9	3.6	4.4	4.1	4.9	6.0	5.0	6.0	7.0
	70				1.8	2.2	2.7	3.0	3.6	4.3	4.1	4.9	6.0	4.8	6.0	7.0
	71				1.8	2.3	2.8				4.2	4.9	6.1	4.8	5.9	7.0
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Outer-City Distribution

Subtest	Yr.	1st Grade * Q_1	1st Grade * Q_2	1st Grade * Q_3	2nd Grade ** Q_1	2nd Grade ** Q_2	2nd Grade ** Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade ** Q_1	5th Grade ** Q_2	5th Grade ** Q_3	6th Grade **** Q_1	6th Grade **** Q_2	6th Grade **** Q_3
Word Study Skills Gr. 2, 3, 5	65															
	66															
	67				1.7	2.0	2.7	2.8	4.2	6.0	3.5	5.7	7.0			
	68				1.7	2.1	2.7	2.9	4.5	6.0	3.9	5.5	6.8			
	69				1.9	2.5	3.2	2.9	4.5	5.8	4.4	6.0	7.0			
	70				1.9	2.5	3.2	2.9	4.5	6.0	4.4	5.8	7.0			
	71				2.0	2.6	3.3				4.3	5.9	6.9			
	72															
	73															
	74															
	75															
Language Gr. 3, 5, 6	65															
	66															
	67				1.6	1.8	2.4	2.8	3.5	4.4	3.6	4.6	6.1	4.6	5.9	7.2
Word Meaning Gr. 1, 2	68				1.6	1.8	2.4	2.8	3.4	4.4	3.6	4.6	5.8	4.4	5.7	6.9
	69				1.7	2.1	2.6	2.8	3.4	4.4	3.3	4.4	5.5	4.4	5.6	6.7
	70	30%	58%	79%	1.8	2.2	2.7	3.1	4.0	5.0	3.6	4.8	6.1	4.4	5.6	6.9
	71	41%	65%	83%	1.8	2.2	2.7				3.9	5.1	6.4	4.5	5.8	7.1
	72															
	73															
	74															
	75															
Arithmetic Computation Gr. 3, 5, 6	65															
	66															
	67				1.8	2.2	2.5	3.2	3.6	3.7	3.8	4.4	4.9	5.0	5.8	6.3
	68				1.8	2.2	2.5	3.2	3.6	3.8	4.0	4.6	5.2	5.0	5.8	6.5
Arithmetic Gr. 2	69				2.0	2.4	2.7	3.3	3.7	3.9	4.5	5.3	5.9	5.2	6.0	7.1
	70	31%	57%	84%	2.0	2.4	2.7	3.5	3.7	4.1	4.5	5.3	5.9	5.4	6.2	7.1
	71	38%	64%	87%	2.0	2.4	2.8				4.5	5.3	6.0	5.5	6.2	7.3
Mathematics Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Outer-City Distribution

Subtest	Yr.	1st Grade * Q_1	1st Grade * Q_2	1st Grade * Q_3	2nd Grade ** Q_1	2nd Grade ** Q_2	2nd Grade ** Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade ** Q_1	5th Grade ** Q_2	5th Grade ** Q_3	6th Grade **** Q_1	6th Grade **** Q_2	6th Grade **** Q_3
Arithmetic Concepts Gr. 3, 5, 6	65															
	66															
	67							2.8	3.8	4.7	4.2	5.4	6.1	5.4	6.1	6.8
	68							2.8	4.0	4.7	4.5	5.4	6.3	5.2	6.1	6.8
	69							2.9	3.8	4.7	4.6	5.7	6.5	5.4	6.3	7.0
	70							3.0	4.1	4.8	4.6	5.7	6.5	5.4	6.3	7.3
	71										4.8	5.7	6.6	5.4	6.4	7.2
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65															
	66															
	67										4.0	4.9	5.9	4.9	5.9	7.1
	68										4.1	4.9	6.1	4.6	5.7	6.6
	69										4.2	5.1	6.5	4.9	5.9	6.8
	70										4.2	5.3	6.5	4.9	5.9	7.1
	71										4.2	5.2	6.6	4.9	6.0	7.1
	72	—														
	73															
	74															
	75															
Social Studies Gr. 5, 6	65															
	66															
	67							3.1	4.0	4.8	4.4	5.6	6.9	5.1	6.0	7.2
Social Studies & Science Gr. 3	68							2.9	3.8	4.8	4.3	5.2	6.2	4.9	5.8	6.6
	69							3.1	4.0	4.8	4.5	5.4	6.7	4.9	5.8	6.8
	70	32%	55%	80%				2.9	3.8	4.7	4.4	5.4	6.7	5.0	5.9	6.8
	71	34%	60%	83%							4.4	5.4	6.4	4.8	5.7	6.6
Environment Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Grade Equivalents)

Outer-City Distribution

Subtest	Yr.	1st Grade * Q_1	1st Grade * Q_2	1st Grade * Q_3	2nd Grade ** Q_1	2nd Grade ** Q_2	2nd Grade ** Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade ** Q_1	5th Grade ** Q_2	5th Grade ** Q_3	6th Grade **** Q_1	6th Grade **** Q_2	6th Grade **** Q_3
Science Gr. 5, 6	65															
	66															
	67										3.9	5.1	6.7	5.0	6.2	7.8
	68										4.1	5.2	6.3	4.7	5.9	7.2
	69										4.3	5.4	6.5	4.9	6.0	7.5
	70										4.2	5.2	6.5	4.9	6.0	7.5
	71										4.3	5.3	6.3	4.6	5.8	7.1
	72															
	73															
	74															
	75															
I.Q.**** Gr. 2, 5	65															
	66															
	67				107	112	122				100	110	120			
	68				105	113	122				100	110	121			
	69				102	111	119				100	109	121			
	70				97	106	115				97	105	115			
	71				97	107	115				97	106	115			
	72															
	73															
	74															
	75															

* No grade equivalents presently available - Expressed as equivalent national percentiles - Adopted in 1970.

** 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since the testing has been done at the 13th and 14th weeks.

*** Kuhlmann-Anderson I.Q. test was given from 1965-69. Otis-Lennon Mental Ability Test was adopted in 1970.

**** Includes no 6th grade condensed scores.

Prior to 1967-68, Outer-City Distributions were not calculated.

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

District Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Word Meaning Gr. 3, 5, 6	65															
	66															
	67				17	23	28	18	23	27	13	20	26	19	27	33
Vocabulary Gr. 2	68				18	23	28	17	23	27	14	21	27	18	26	33
	69				19	25	29	18	23	27	16	23	29	18	26	33
	70	23	32	37	20	25	29	18	23	27	15	22	28	19	27	34
Letters & Sounds Gr. 1	71	27	34	37	21	25	29				15	23	29	18	25	33
	72															
	73															
	74															
	75															
Paragraph Meaning Gr. 2, 3, 5, 6	65															
	66															
	67				12	19	30	28	40	48	20	30	39	24	33	42
Aural Comprehension Gr. 1	68				12	19	30	28	39	47	22	31	40	23	33	42
	69				15	25	33	28	39	47	22	32	41	24	33	43
	70	14	17	20	17	26	34	30	40	48	23	33	42	24	33	43
	71	15	18	20	18	28	34				24	33	42	23	32	43
	72															
	73															
	74															
	75															
Spelling Gr. 2, 3, 5, 6	65															
	66															
	67				4	10	15	10	18	24	19	29	37	20	28	35
	68				4	9	15	10	17	23	20	30	38	20	27	36
	69				8	14	18	10	17	23	21	31	39	21	29	37
	70				10	15	18	11	18	23	21	31	39	21	29	37
	71				10	15	18				20	30	39	20	28	36
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

District Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Word Study Skills Gr. 2, 3, 5	65															
	66															
	67				31	37	45	32	44	55	29	41	50			
	68				30	37	45	31	44	54	30	42	51			
	69				33	41	47	30	44	54	32	45	52			
	70				34	42	48	32	45	55	32	44	52			
	71				35	43	49				32	44	52			
	72															
	73															
	74															
	75															
Language Gr. 3, 5, 6	65															
	66															
	67				15	20	28	34	42	50	58	70	84	67	80	93
Word Meaning Gr. 1, 2	68				15	20	27	34	42	50	59	71	83	66	80	93
	69				17	24	30	34	42	50	55	68	81	66	79	92
	70	20	27	36	19	25	31	37	47	55	59	72	85	66	80	93
	71	22	30	39	20	26	32				63	76	88	67	81	96
	72															
	73															
	74															
	75															
Arithmetic Computation Gr. 3, 5, 6	65															
	66															
	67				33	43	51	27	32	36	12	16	19	11	15	19
	68				34	43	52	27	32	36	13	18	23	11	16	22
Arithmetic Gr. 2	69				38	47	54	29	34	38	16	22	28	13	18	24
	70	25	32	39	39	48	55	30	35	40	16	22	28	13	19	25
	71	27	34	41	41	49	56				17	23	29	13	19	25
Mathematics Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

District Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Arithmetic Concepts Gr. 3, 5, 6	65															
	66															
	67							18	26	33	12	17	21	9	13	17
	68							18	26	33	12	18	23	9	14	19
	69							18	26	34	13	19	24	10	15	20
	70							19	28	35	14	19	24	10	15	20
	71										14	20	25	10	15	20
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65															
	66															
	67										10	16	21	11	17	22
	68										11	17	22	11	16	23
	69										12	18	23	12	18	24
	70										12	18	24	12	18	25
	71										12	18	23	12	18	24
	72															
	73															
	74															
	75															
Social Studies Gr. 5, 6	65															
	66															
	67							18	23	27	19	27	34	29	37	47
Social Studies & Science Gr. 3	68							18	22	26	20	28	34	28	37	47
	69							18	22	26	21	29	35	28	37	47
	70	20	24	28				18	22	26	22	30	36	29	38	48
	71	21	25	28							22	30	35	27	36	46
Environment Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

District Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade Q_1	6th Grade Q_2	6th Grade Q_3
Science Gr. 5, 6	65															
	66															
	67										21	32	41	24	31	39
	68										22	33	42	23	31	40
	69										24	34	42	24	33	40
	70										23	33	42	24	32	40
	71										24	34	42	23	31	39
	72															
	73															
	74															
	75															

* 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since, the testing has been done at the 13th and 14th weeks.

Prior to 1967-68, District Raw Score Distributions were not calculated.

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Inner-City Distribution

Subtest	Yr.	1st Grade			2nd Grade *			3rd Grade			5th Grade *			6th Grade **		
		Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Word Meaning	65															
Gr. 3, 5, 6	66															
	67				14	17	22	13	18	23	9	14	21	14	19	26
Vocabulary	68				14	17	22	13	18	22	10	15	22	13	17	23
Gr. 2	69				14	18	23	11	16	21	10	15	22	12	18	25
	70	19	25	32	15	19	24	13	17	23	9	13	21	12	18	26
Letters & Sounds	71	22	29	35	16	20	25				9	14	21	13	17	22
Gr. 1	72															
	73															
	74															
	75															
Paragraph Meaning	65															
Gr. 2, 3, 5, 6	66															
	67				10	14	20	20	30	41	16	21	18	25	35	
Aural	68				9	12	18	18	28	38	18	23	33	17	30	
Comprehension	69				9	14	22	15	24	34	17	22	31	17	23	33
Gr. 1	70	12	15	18	12	16	25	18	29	38	17	23	31	17	23	32
	71	13	15	18	11	18	29				16	22	30	16	22	29
	72															
	73															
	74															
	75															
Spelling	65															
Gr. 2, 3, 5, 6	66															
	67				2	6	11	5	12	20	14	22	31	17	23	29
	68				1	4	8	5	11	18	15	23	34	15	21	27
	69				3	8	13	4	9	15	15	23	34	16	22	30
	70				6	11	16	5	10	17	15	22	32	17	23	30
	71				6	11	17				14	20	29	16	22	29
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Inner-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Word Study Skills Gr. 2, 3, 5	65															
	66															
	67				26	32	37	25	34	50	22	30	41			
	68				24	30	36	24	31	43	23	32	44			
	69				27	33	39	22	27	39	22	31	43			
	70				26	34	40	24	31	43	23	31	43			
	71				29	35	42				22	30	42			
	72															
	73															
	74															
	75															
Language Gr. 3, 5, 6	65															
	66															
	67				13	16	21	30	36	44	49	58	68	58	70	80
Word Meaning Gr. 1, 2	68				13	15	20	28	34	40	51	60	71	56	65	77
	69				13	17	22	28	33	38	45	53	65	54	64	78
	70	17	23	32	14	18	25	31	37	45	49	58	69	55	64	78
	71	19	26	40	15	21	27				52	61	73	56	65	78
	72															
	73															
	74															
	75															
Arithmetic Computation Gr. 3, 5, 6	65															
	66															
	67				24	34	44	24	30	34	10	14	16	8	12	15
	68				23	33	43	24	30	34	11	16	20	8	11	15
Arithmetic Gr. 2	69				29	39	45	23	29	34	12	17	22	10	14	20
	70	21	27	34	27	38	46	23	30	35	12	17	23	11	14	19
	71	23	29	37	34	42	50				12	17	23	10	14	18
Mathematics Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Inner-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Arithmetic Concepts Gr. 3, 5, 6	65															
	66															
	67							13	19	28	7	11	16	7	10	14
	68							13	18	25	9	13	18	6	9	13
	69							12	17	25	9	13	19	8	10	15
	70							13	20	27	9	13	18	7	10	14
	71										9	13	19	7	10	13
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65															
	66															
	67										8	11	16	9	12	17
	68										8	12	18	8	11	15
	69										8	12	18	9	12	17
	70										8	12	18	9	12	16
	71										8	12	18	8	11	16
	72															
	73															
	74															
	75															
Social Studies Gr. 5, 6	65															
	66															
	67							15	18	22	15	19	26	23	29	38
Social Studies & Science Gr. 3	68							14	17	21	15	21	28	23	28	34
	69							14	17	21	15	20	26	23	28	36
	70	18	21	24				14	18	22	16	21	28	22	27	34
Environment Gr. 1	71	19	22	25							15	20	27	21	25	32
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Inner-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Science Gr. 5, 6	65															
	66															
	67										16	22	30	18	24	32
	68										17	23	33	17	22	28
	69										16	22	32	18	24	32
	70										16	22	31	17	21	30
	71										16	22	31	16	21	28
	72															
	73															
	74															
	75															

* 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since, the testing has been done at the 13th and 14th weeks.

** Includes no 6th grade condensed scores.

Prior to 1967-68, Inner-City Distributions were not calculated.

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Outer-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Word Meaning Gr. 3, 5, 6	65															
	66															
	67				20	25	29	20	24	28	15	23	29	22	29	34
Vocabulary Gr. 2	68				20	25	29	20	24	28	16	23	28	21	28	33
	69				22	26	30	20	24	28	18	25	30	20	26	33
	70	26	34	37	23	27	30	20	24	28	17	24	29	21	27	33
Letters & Sounds Gr. 1	71	28	35	37	23	27	30				18	24	29	20	27	33
	72															
	73															
	74															
	75															
Paragraph Meaning Gr. 2, 3, 5, 6	65															
	66															
	67				14	22	32	33	43	49	23	33	42	27	35	44
Aural Comprehension Gr. 1	68				15	23	32	32	42	48	24	33	41	25	34	41
	69				19	29	34	32	42	48	26	35	43	25	34	42
	70	15	18	20	20	30	35	33	42	49	26	36	44	25	34	43
	71	16	18	21	21	30	35				26	36	44	25	33	42
	72															
	73															
	74															
	75															
Spelling Gr. 2, 3, 5, 6	65															
	66															
	67				6	11	16	13	19	25	22	33	39	22	30	37
	68				6	11	16	12	19	24	22	31	39	21	28	36
	69				11	15	18	12	19	25	23	32	40	22	29	36
	70				11	15	19	13	19	24	23	32	40	21	29	36
	71				11	16	19				24	32	40	21	28	36
	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Outer-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Word Study Skills Gr. 2, 3, 5	65															
	66															
	67				33	39	46	35	47	56	32	45	53			
	68				33	40	46	36	48	56	34	44	52			
	69				37	44	49	36	48	55	37	47	53			
	70				37	44	49	36	48	56	37	46	53			
	71				38	45	50				36	46	52			
	72															
	73															
	74															
	75															
Language Gr. 3, 5, 6	65															
	66															
	67				17	22	29	37	45	52	63	74	88	71	84	96
Word Meaning Gr. 1, 2	68				17	22	29	37	44	52	63	74	85	69	82	93
	69				20	26	31	37	44	52	59	72	83	69	81	92
	70	21	28	36	21	27	32	41	50	57	63	76	88	69	81	93
	71	23	30	39	21	27	32				67	79	90	70	83	95
	72															
	73															
	74															
	75															
Arithmetic Computation Gr. 3, 5, 6	65															
	66															
	67				37	46	53	29	33	36	13	17	21	12	16	20
	68				38	47	53	29	33	37	14	19	23	12	16	21
Arithmetic Gr. 2	69				42	50	56	30	35	39	18	24	29	13	18	24
	70	26	33	40	43	50	56	32	36	41	18	24	29	14	19	24
	71	28	35	42	43	51	57				18	24	30	15	19	25
Mathematics Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Outer-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Arithmetic Concepts Gr. 3, 5, 6	65															
	66															
	67							20	28	35	13	19	23	11	14	18
	68							20	29	35	14	19	24	10	14	18
	69							21	28	35	15	21	25	11	15	19
	70							22	30	36	15	21	25	11	15	20
	71										16	21	25	11	16	20
	72															
	73															
	74															
	75															
Arithmetic Applications Gr. 5, 6	65															
	66															
	67										12	18	23	13	18	24
	68										13	18	23	12	17	22
	69										14	19	24	13	18	23
	70										14	20	24	13	18	24
	71										14	20	24	13	19	24
	72															
	73															
	74															
	75															
Social Studies Gr. 5, 6	65															
	66															
	67							20	24	27	24	32	38	32	40	49
Social Studies & Science Gr. 3	68							19	23	27	23	30	35	30	38	46
	69							20	24	27	25	31	37	30	38	47
	70	22	25	29				19	23	27	24	31	37	31	39	47
	71	22	26	29							24	31	36	29	37	46
Environment Gr. 1	72															
	73															
	74															
	75															

STANFORD ACHIEVEMENT AND OTIS-LENNON TEST RESULTS
(Raw Score)

Outer-City Distribution

Subtest	Yr.	1st Grade Q_1	1st Grade Q_2	1st Grade Q_3	2nd Grade * Q_1	2nd Grade * Q_2	2nd Grade * Q_3	3rd Grade Q_1	3rd Grade Q_2	3rd Grade Q_3	5th Grade * Q_1	5th Grade * Q_2	5th Grade * Q_3	6th Grade ** Q_1	6th Grade ** Q_2	6th Grade ** Q_3
Science Gr. 5, 6	65															
	66															
	67										23	35	44	27	34	41
	68										25	36	43	25	33	39
	69										28	37	44	26	33	40
	70										26	36	44	26	33	40
	71										28	36	43	24	32	39
	72															
	73															
	74															
	75															

* 1965-66 to 1968-69 2nd and 5th grade testing was done during the 7th week; since, the testing has been done at the 13th and 14th weeks.

** Includes no 6th grade condensed scores.

Prior to 1967-68, Outer-City Distributions were not calculated.

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1971-72 OTIS-LENNON TEST RESULTS
Grades 2 & 5

1971-72 METROPOLITAN TEST RESULTS
Grades K, 1, 2, 3, 4, 5 & 6

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July, 1972

Department of Research & Development
Unified School District No. 1
Racine, Wisconsin

District _____ Distribution

METROPOLITAN ACHIEVEMENT AND OTIS-LENNON MENTAL ABILITY TEST RESULTS
(Grade Equivalents or I.Q./Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
I.Q.						
2	Q_1	94/37%				
	Q_2	103/59%				
	Q_3	113/80%				
5	Q_1	93/34%				
	Q_2	104/61%				
	Q_3	114/82%				
Word Knowledge						
1	Q_1	1.7/38%				
	Q_2	2.0/66%				
	Q_3	2.5/86%				
2	Q_1	2.5/32%				
	Q_2	2.9/58%				
	Q_3	3.5/80%				
3	Q_1	3.1/32%				
	Q_2	3.8/56%				
	Q_3	4.8/77%				
4	Q_1	3.7/26%				
	Q_2	5.0/56%				
	Q_3	6.1/78%				
5	Q_1	4.7/30%				
	Q_2	6.0/56%				
	Q_3	7.3/77%				
6	Q_1	5.4/28%				
	Q_2	6.7/50%				
	Q_3	8.1/72%				

District _____ Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Reading						
K	Q_1	54%				
	Q_2	80%				
	Q_3	92%				
1	Q_1	1.6/38%				
	Q_2	1.9/62%				
	Q_3	2.3/86%				
2	Q_1	2.3/32%				
	Q_2	2.8/60%				
	Q_3	3.5/82%				
3	Q_1	2.8/30%				
	Q_2	3.6/56%				
	Q_3	4.7/77%				
4	Q_1	3.4/26%				
	Q_2	4.5/50%				
	Q_3	5.9/72%				
5	Q_1	4.5/26%				
	Q_2	5.9/50%				
	Q_3	7.1/77%				
6	Q_1	5.1/24%				
	Q_2	6.5/50%				
	Q_3	8.7/82%				
Spelling						
2	Q_1	2.5/34%				
	Q_2	3.0/56%				
	Q_3	4.3/82%				
3	Q_1	3.0/32%				
	Q_2	3.7/54%				
	Q_3	4.8/78%				
4	Q_1	3.6/22%				
	Q_2	4.7/44%				
	Q_3	5.6/68%				
5	Q_1	4.8/30%				
	Q_2	5.6/52%				
	Q_3	6.8/78%				
6	Q_1	5.8/34%				
	Q_2	6.8/58%				
	Q_3	8.3/77%				

District _____ Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Listening for Sounds						
K	Q_1	64%				
	Q_2	82%				
	Q_3	96%				
Word Analysis						
1	Q_1	1.7/46%				
	Q_2	2.0/68%				
	Q_3	2.2/84%				
2	Q_1	2.4/36%				
	Q_2	3.1/62%				
	Q_3	3.8/80%				
Language						
3	Q_1	3.6/42%				
	Q_2	5.0/70%				
	Q_3	6.4/90%				
4	Q_1	4.3/32%				
	Q_2	5.4/58%				
	Q_3	7.0/80%				
5	Q_1	5.1/34%				
	Q_2	6.7/60%				
	Q_3	8.0/80%				
6	Q_1	5.6/26%				
	Q_2	7.2/52%				
	Q_3	9.3/76%				

District _____ Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Numbers						
K	Q_1	56%				
	Q_2	80%				
	Q_3	92%				
Mathematics: Computation						
1	Q_1	1.6/40%				
	Q_2	2.2/68%				
	Q_3	2.6/88%				
2	Q_1	2.7/40%				
	Q_2	3.0/62%				
	Q_3	3.3/78%				
3	Q_1	3.7/42%				
	Q_2	4.3/70%				
	Q_3	4.9/86%				
4	Q_1	4.4/32%				
	Q_2	5.3/60%				
	Q_3	6.2/80%				
5	Q_1	5.7/48%				
	Q_2	6.8/74%				
	Q_3	8.5/94%				
6	Q_1	6.6/42%				
	Q_2	8.1/72%				
	Q_3	9.9/89%				
Mathematics: Concepts						
2	Q_1	2.7/38%				
	Q_2	3.3/62%				
	Q_3	4.0/84%				
3	Q_1	3.4/38%				
	Q_2	4.4/68%				
	Q_3	5.5/86%				
4	Q_1	4.0/30%				
	Q_2	5.2/56%				
	Q_3	6.3/80%				
5	Q_1	5.2/42%				
	Q_2	7.1/72%				
	Q_3	8.9/90%				
6	Q_1	6.1/38%				
	Q_2	7.9/64%				
	Q_3	9.5/80%				

District _____ Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Mathematics: Problem Solving						
2	Q_1	2.7/38%				
	Q_2	3.1/64%				
	Q_3	3.7/86%				
3	Q_1	3.3/36%				
	Q_2	4.1/62%				
	Q_3	5.4/84%				
4	Q_1	3.9/28%				
	Q_2	5.1/54%				
	Q_3	6.4/78%				
5	Q_1	4.9/34%				
	Q_2	6.3/64%				
	Q_3	7.7/88%				
6	Q_1	5.6/34%				
	Q_2	7.4/68%				
	Q_3	9.1/86%				
Science						
5	Q_1	5.0/34%				
	Q_2	6.2/62%				
	Q_3	7.4/80%				
6	Q_1	5.5/28%				
	Q_2	7.1/58%				
	Q_3	9.4/86%				
Social Studies						
5	Q_1	4.9/32%				
	Q_2	5.8/58%				
	Q_3	7.3/78%				
6	Q_1	5.5/28%				
	Q_2	6.6/52%				
	Q_3	8.0/70%				

Inner-City Distribution

METROPOLITAN ACHIEVEMENT AND OTIS-LENNON MENTAL ABILITY TEST RESULTS
(Grade Equivalents or I.Q./Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
I.Q.						
2	Q_1	83/15%				
	Q_2	93/34%				
	Q_3	102/56%				
5	Q_1	83/15%				
	Q_2	90/28%				
	Q_3	99/49%				
Word Knowledge						
1	Q_1	1.4/22%				
	Q_2	1.8/46%				
	Q_3	2.3/77%				
2	Q_1	2.2/16%				
	Q_2	2.5/32%				
	Q_3	2.9/58%				
3	Q_1	2.6/20%				
	Q_2	3.2/36%				
	Q_3	3.7/52%				
4	Q_1	3.1/14%				
	Q_2	3.7/26%				
	Q_3	4.5/48%				
5	Q_1	3.5/10%				
	Q_2	4.4/24%				
	Q_3	5.4/46%				
6	Q_1	4.4/14%				
	Q_2	5.3/26%				
	Q_3	6.5/46%				

Inner-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Reading						
K	Q_1	46%				
	Q_2	72%				
	Q_3	88%				
1	Q_1	1.4/20%				
	Q_2	1.7/48%				
	Q_3	2.0/74%				
2	Q_1	1.8/14%				
	Q_2	2.4/36%				
	Q_3	2.8/60%				
3	Q_1	2.4/18%				
	Q_2	2.9/34%				
	Q_3	3.6/56%				
4	Q_1	2.7/10%				
	Q_2	3.4/26%				
	Q_3	4.1/40%				
5	Q_1	3.6/12%				
	Q_2	4.4/24%				
	Q_3	5.7/46%				
6	Q_1	4.1/11%				
	Q_2	4.9/22%				
	Q_3	6.5/50%				
Spelling						
2	Q_1	2.1/16%				
	Q_2	2.6/36%				
	Q_3	3.1/64%				
3	Q_1	2.4/14%				
	Q_2	3.0/32%				
	Q_3	4.1/60%				
4	Q_1	2.9/11%				
	Q_2	3.7/24%				
	Q_3	4.8/50%				
5	Q_1	4.1/16%				
	Q_2	4.9/34%				
	Q_3	5.6/52%				
6	Q_1	5.1/22%				
	Q_2	6.2/44%				
	Q_3	7.0/60%				

Inner-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Listening for Sounds						
K	Q_1	46%				
	Q_2	78%				
	Q_3	94%				
Word Analysis						
1	Q_1	1.6/34%				
	Q_2	1.8/54%				
	Q_3	2.1/80%				
2	Q_1	2.0/20%				
	Q_2	2.5/38%				
	Q_3	3.1/62%				
Language						
3	Q_1	3.0/26%				
	Q_2	3.6/42%				
	Q_3	4.6/62%				
4	Q_1	3.3/18%				
	Q_2	4.1/30%				
	Q_3	5.3/54%				
5	Q_1	4.0/16%				
	Q_2	5.0/30%				
	Q_3	6.4/56%				
6	Q_1	4.5/12%				
	Q_2	5.3/22%				
	Q_3	6.7/44%				

Inner-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Numbers						
K	Q_1	46%				
	Q_2	70%				
	Q_3	89%				
Mathematics: Computation						
1	Q_1	1.4/20%				
	Q_2	1.8/48%				
	Q_3	2.4/76%				
2	Q_1	2.3/22%				
	Q_2	2.7/40%				
	Q_3	3.0/62%				
3	Q_1	3.2/22%				
	Q_2	3.9/52%				
	Q_3	4.6/78%				
4	Q_1	3.7/14%				
	Q_2	4.4/32%				
	Q_3	5.3/60%				
5	Q_1	5.0/26%				
	Q_2	5.7/48%				
	Q_3	6.6/70%				
6	Q_1	5.6/22%				
	Q_2	6.6/42%				
	Q_3	8.1/72%				
Mathematics: Concepts						
2	Q_1	2.2/18%				
	Q_2	2.7/38%				
	Q_3	3.3/62%				
3	Q_1	2.8/16%				
	Q_2	3.3/34%				
	Q_3	4.2/64%				
4	Q_1	3.2/12%				
	Q_2	3.8/24%				
	Q_3	5.1/52%				
5	Q_1	4.0/18%				
	Q_2	4.9/38%				
	Q_3	6.5/64%				
6	Q_1	4.8/18%				
	Q_2	5.9/36%				
	Q_3	7.5/60%				

Inner-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Mathematics: Problem Solving						
2	Q_1	2.4/26%				
	Q_2	2.8/42%				
	Q_3	3.1/64%				
3	Q_1	2.8/18%				
	Q_2	3.4/40%				
	Q_3	4.0/58%				
4	Q_1	3.1/10%				
	Q_2	3.8/26%				
	Q_3	4.6/44%				
5	Q_1	3.9/18%				
	Q_2	4.6/30%				
	Q_3	6.1/60%				
6	Q_1	4.6/16%				
	Q_2	5.6/34%				
	Q_3	7.1/64%				
Science						
5	Q_1	3.6/12%				
	Q_2	4.6/26%				
	Q_3	5.8/52%				
6	Q_1	4.4/12%				
	Q_2	5.3/24%				
	Q_3	6.5/48%				
Social Studies						
5	Q_1	3.9/14%				
	Q_2	4.8/28%				
	Q_3	5.6/50%				
6	Q_1	4.5/14%				
	Q_2	5.3/26%				
	Q_3	6.0/42%				

Outer-City Distribution

METROPOLITAN ACHIEVEMENT AND OTIS-LENNON MENTAL ABILITY TEST RESULTS
(Grade Equivalents or I.Q./Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
I.Q.						
2	Q_1	97/44%				
	Q_2	107/68%				
	Q_3	115/83%				
5	Q_1	97/44%				
	Q_2	106/66%				
	Q_3	115/83%				
Word Knowledge						
1	Q_1	1.8/46%				
	Q_2	2.1/70%				
	Q_3	2.5/86%				
2	Q_1	2.6/44%				
	Q_2	3.0/64%				
	Q_3	3.7/86%				
3	Q_1	3.3/40%				
	Q_2	4.1/64%				
	Q_3	5.0/80%				
4	Q_1	4.1/36%				
	Q_2	5.4/66%				
	Q_3	6.7/84%				
5	Q_1	5.0/36%				
	Q_2	6.3/62%				
	Q_3	7.7/80%				
6	Q_1	5.8/32%				
	Q_2	6.9/52%				
	Q_3	8.1/72%				

Outer-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Reading						
K	Q1	64%				
	Q2	80%				
	Q3	92%				
1	Q1	1.7/48%				
	Q2	2.0/70%				
	Q3	2.4/88%				
2	Q1	2.5/40%				
	Q2	2.9/64%				
	Q3	3.8/88%				
3	Q1	3.0/38%				
	Q2	3.9/64%				
	Q3	5.1/82%				
4	Q1	3.7/34%				
	Q2	4.9/56%				
	Q3	6.1/76%				
5	Q1	4.9/32%				
	Q2	6.1/56%				
	Q3	7.3/80%				
6	Q1	5.5/28%				
	Q2	6.7/54%				
	Q3	8.7/82%				
Spelling						
2	Q1	2.6/38%				
	Q2	3.0/60%				
	Q3	4.3/82%				
3	Q1	3.1/38%				
	Q2	4.1/60%				
	Q3	5.0/82%				
4	Q1	3.7/24%				
	Q2	4.8/50%				
	Q3	6.0/76%				
5	Q1	5.0/38%				
	Q2	6.0/60%				
	Q3	7.2/82%				
6	Q1	6.0/38%				
	Q2	6.8/58%				
	Q3	7.9/74%				

Outer-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Listening for Sounds						
K	Q_1	64%				
	Q_2	88%				
	Q_3	96%				
Word Analysis						
1	Q_1	1.7/46%				
	Q_2	2.0/68%				
	Q_3	2.2/84%				
2	Q_1	2.6/44%				
	Q_2	3.2/66%				
	Q_3	4.1/86%				
Language						
3	Q_1	4.1/52%				
	Q_2	5.3/76%				
	Q_3	7.0/92%				
4	Q_1	4.7/40%				
	Q_2	5.9/66%				
	Q_3	7.2/84%				
5	Q_1	5.6/42%				
	Q_2	7.0/64%				
	Q_3	8.7/83%				
6	Q_1	5.9/30%				
	Q_2	7.2/52%				
	Q_3	9.3/76%				

Outer-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Numbers						
K	Q_1	56%				
	Q_2	80%				
	Q_3	92%				
Mathematics Computation						
1	Q_1	1.8/48%				
	Q_2	2.3/74%				
	Q_3	2.7/89%				
2	Q_1	2.8/46%				
	Q_2	3.1/68%				
	Q_3	3.5/82%				
3	Q_1	3.9/52%				
	Q_2	4.4/74%				
	Q_3	5.1/89%				
4	Q_1	4.7/42%				
	Q_2	5.5/66%				
	Q_3	6.7/88%				
5	Q_1	6.0/58%				
	Q_2	7.1/78%				
	Q_3	8.5/92%				
6	Q_1	6.8/48%				
	Q_2	8.5/76%				
	Q_3	9.9/89%				
Mathematics: Concepts						
2	Q_1	2.9/42%				
	Q_2	3.4/68%				
	Q_3	4.0/84%				
3	Q_1	3.8/50%				
	Q_2	4.6/72%				
	Q_3	5.7/88%				
4	Q_1	4.4/38%				
	Q_2	5.5/62%				
	Q_3	6.7/86%				
5	Q_1	5.9/54%				
	Q_2	7.5/78%				
	Q_3	8.9/90%				
6	Q_1	6.7/46%				
	Q_2	7.9/64%				
	Q_3	9.5/80%				

Outer-City Distribution

METROPOLITAN ACHIEVEMENT TEST RESULTS
(Grade Equivalents/Equivalent National Percentile By Grade)

		Year 71-72	72-73	73-74	74-75	75-76
Mathematics: Problem Solving						
2	Q_1	2.8/42%				
	Q_2	3.2/68%				
	Q_3	3.7/86%				
3	Q_1	3.5/44%				
	Q_2	4.5/70%				
	Q_3	5.6/88%				
4	Q_1	4.3/36%				
	Q_2	5.6/64%				
	Q_3	7.0/86%				
5	Q_1	5.2/44%				
	Q_2	6.5/68%				
	Q_3	7.7/88%				
6	Q_1	5.8/38%				
	Q_2	7.4/68%				
	Q_3	9.1/90%				
Science						
5	Q_1	5.3/42%				
	Q_2	6.5/66%				
	Q_3	7.6/82%				
6	Q_1	6.0/38%				
	Q_2	7.3/62%				
	Q_3	9.4/86%				
Social Studies						
5	Q_1	5.3/42%				
	Q_2	6.2/62%				
	Q_3	7.7/81%				
6	Q_1	5.7/34%				
	Q_2	6.8/54%				
	Q_3	8.0/70%				